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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,883	08/27/2001	Volker Breu	20725	4828
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PATENT LAW I		PE	TRUONG, TAM	THOM NGO
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1,01221,113	<i>77110</i>	NIB 1 6 2004	1624	,
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Please find below and/or attached an Office communication concerning this application or proceeding.

RESPONSE DUE:

STATUTORY

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	2001	Application No.	Applicant(s)	
	NB 1 8 5004 &	09/939,883	BREU ET AL.	
Office Action Summary	, second	Examiner	Art Unit	<del></del>
	A TRADE	Tamthom N. Truong	1624	
The MAILING DATE of this comm	unication appe	ars on the cover she	et with the correspondence a	nddress
Period for Reply  A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMU  - Extensions of time may be available under the provisi after SIX (6) MONTHS from the mailing date of this oc  - If the period for reply specified above is less than third  - If NO period for reply is specified above, the maximur  - Failure to reply within the set or extended period for not Any reply received by the Office later than three mont earned patent term adjustment. See 37 CFR 1.704(b)  Status  1) □ Responsive to communication(s)  2a) □ This action is FINAL.  3) □ Since this application is in condition closed in accordance with the practice of the properties of the	D FOR REPLY JNICATION. ions of 37 CFR 1.136 communication. by (30) days, a reply w in statutory period will eply will, by statute, o this after the mailing of the safer the saf	IS SET TO EXPIRE  (a). In no event, however, revithin the statutory minimum apply and will expire SIX (6 ause the application to become at the of this communication, experience of the communication, experience of the communication and the except for formal parte Quayle, 1935  (192-96) is/are pending from consideration	any a reply be timely filed of thirty (30) days will be considered time. ) MONTHS from the mailing date of this me ABANDONED (35 U.S.C. § 133). Even if timely filed, may reduce any matters, prosecution as to the C.D. 11, 453 O.G. 213.	ely. communication.
7) Claim(s) 2-4,11-13,20-38,50-58,6 8) Claim(s) are subject to rest	0-69,73,74,77,	78,85,86 and 93-96	is/are objected to.	
Application Papers		•		
9) The specification is objected to by 10) The drawing(s) filed on is/ar Applicant may not request that any ob-	re: a)∏ accep ojection to the dr	awing(s) be held in ab	eyance. See 37 CFR 1.85(a).	FR 1 121(d)
11) The oath or declaration is objected				• •
Priority under 35 U.S.C. § 119			·	
12) Acknowledgment is made of a claim a) All b) Some * c) None of: 1 Certified copies of the priori 2. Certified copies of the priori 3. Copies of the certified copies	ty documents h ty documents h s of the priority	nave been received nave been received v documents have b	in Application No	Stage
application from the Internat  * See the attached detailed Office act	•		not received.	
Attachment(s)		_		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review</li> <li>Information Disclosure Statement(s) (PTO-1449 Paper No(s)/Mail Date 4.6.</li> </ol>	(PTO-948) or PTO/SB/08)	Paper 5) 🔲 Notice	ew Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PTO	O-152)
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)	Office Actio	n Summary	Part of Paper No./Mail D	ate 20040415

Application/Control Number: 09/939,883

Art Unit: 1624

#### **DETAILED ACTION**

Applicant's amendment of 01-23-04 has been considered. The amended claims have overcome the previous rejection of 112/2<sup>nd</sup> by amending the definition of R<sup>8</sup> to include "alkylene", and not "alkyl". Also, claim 49 has been amended to recite "R<sup>8</sup>" as opposed to R<sup>9</sup>. Thus, the previous 112/2<sup>nd</sup> rejection is withdrawn herein.

Claims 7, 10, 16, 39-47, 79-81, 87-91, and 97-145 have been cancelled. Therefore, only claims 1-6, 8, 9, 11-15, 17-38, 48-78, 82-86, and 92-96 are pending.

The cancellation of non-elected subject matter is appreciated.

An update search yields a reference having one common inventor, and thus, prompts the following new ground of rejection.

#### Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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1. Claims 1-4, 6, 14, 15, 17-19, 48, 49, 59, 70-72, 75, 76, 82-84, and 92 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5-9 of U.S. Patent No. 6,696,467 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of formula I of US'467 overlap with those of the instant formula I when the reference's R¹ and R² "form a 5- to 10-membered heterocyclic ring", which reads on the definition of the instant R³ as a a heteroaryl group. Although claim 1 of US'467 does not indicate whether the heterocyclic ring is aromatic, in the specification, the examples of such a heterocyclyl group include pyridinyl, fury, thiophenyl which are aromatic. Thus, it would have been obvious the scope of formula I in US'467 encompasses the scope of the instant formula I.

#### Claim Objections

- 2. Claims 2-4, 11-13, 20-38, 50-58, 60-69, 73, 74, 77, 78, 85, 86, and 93-96 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 3. Also, claim 11 is an improper dependent claim because it depends on the cancelled claim 11.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F ( $\sim 10$  am  $\sim 6:30$  pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached at 571-272-0674. If you are unable to reach Dr. Shah within a 24 hour period, please contact James O. Wilson, Acting SPE of 1624, at 571-272-0661.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

PRIMARY EXAMINER

r. Truong

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April 15, 2004

Notice of References Cited

Notice of References Cited

France Transport

Notice of References Cited

France Transport

Notice of References Cited

Examiner

Tamthom N. Truong

Applicant(s)/Patent Under Reexamination BREU ET AL.

Examiner

Tamthom N. Truong

Page 1 of 1

#### **U.S. PATENT DOCUMENTS**

*	-	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	Α	US-6,696,467	02-2004	Mattei et al.	514/313
	В	US-			
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#### **FOREIGN PATENT DOCUMENTS**

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#### NON-PATENT DOCUMENTS

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	N.C3	Miyayra et al., J. Org. Chem. 60, pgs. 7508-7510 (1995)	+
	,/C4	Miyaura et al., Chem. Rev. 95, pgs. 2457-2483 (1995) .  J. K. Stille, Angew Chem. 98, 509, 504, 504, 504, 504, 504, 504, 504, 504	
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	C5		
	. C6	Widdowson at al. (7) - 1 (1998)	
	CC7	Widdowson et al., Tetrahedron 42, pgs. 2111-2116(1986)  E. I. Negishi, Acc. Chem. Res. 15	
1		E. I. Negishi, Acc. Chem. Res. 15, pgs. 340-348 (1982),  Webber et al., J. Med. Chem. 36, 2007-1148 (1982),	
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NON PATENT LITERATURE DOCUMENTS Examiner Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title Initials' No.1 of the item (book, magazine, journal, serial, symposium catalog, etc.), date, page(s), volumeissue number(s), publisher, city and/or country where published **C9** Chem. Abstracts, XP002190201 for Heterocycl. Commun., TWI Korodi, Ferenc, 1(1), pgs 59-68 (1994), C10 Chem. Abstracts, XP002190202 for Farmaco, Savini, Luisa, et -al<del>.,</del> 49(10), pgs-633-9-(1994)-------Chem. Abstracts, XP 002190203 for Arch., Pharm., Sathi Ç11 Garima, et al., 316(9), pgs. 767-72 (1983) **C**12 Chem. Abstracts, XP002190204 for Khim.-Farm. Zh., Yakhontov., L.N., et al., 9(11), pgs 12-18 (1975) . Examiner Signature CONSIDERED

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